

REMARKS

Claims 1-21, 23, and 25-27 are pending in the application. Claims 1-17 were withdrawn from consideration as being directed to non-elected subject matter. Independent claim 18 has been amended to incorporate the subject matter of claims 22 and 24, which are canceled without prejudice, and to recite "the hexagons being defined by a plurality of convex portions forming walls spaced apart from one another, wherein the walls do not form a closed ring." The amendments are fully supported by the application as originally filed (see, e.g., specification at page 36, lines 19-23; page 39, lines 14-17; and FIGS. 14(b) and 22(b)).

Claims 18-28 were rejected under 35 USC 112, second paragraph, as being indefinite because of the language "that holds" in the preamble of claim 18. Claim 18 has been amended to replace "that holds" with "for holding," as recommended by the Examiner. Claims 24 and 28 have been canceled without prejudice, thereby obviating the rejections. It is believed that the rejections under 35 USC 112, second paragraph have been overcome.

Applicants' claimed invention is directed to a substrate holding device for holding a substrate in a vacuum, including an adhesive pad or adhesive sheet, "the adhesive pad or the adhesive sheet having an adhesive face with surface irregularities, wherein raised portions of the surface irregularities are arranged in the form of hexagons in a honeycomb pattern, so as to constitute at least part of sides of the hexagons, the hexagons being defined by a plurality of convex portions forming walls spaced apart from one another, wherein the walls do not form a closed ring," as recited in independent claim 18.

For example, referring to FIG. 14(b) of the application, in an adhesive sheet 51, convex sections 61 are arranged in a hexagonal pattern, where the ends of the convex sections 61 constitute the respective sides of a hexagon (see specification at page 39, lines 14-17). Referring to page 39, lines 2-7 of the specification: "with the convex sections 61 arranged in a hexagonal pattern, a good balance is maintained for the rigidity of the raised portions 61, enabling the raised portions 61 to oppose input of horizontal force over a range of 360°, thereby achieving the

alignment with ease." As described on page 39, lines 17-24 of the specification, the arrangement of the convex sections/raised portions 61 "provides a passageway for the air inside each hexagon formed by the raised portions 61, even when a vacuum atmosphere" surrounds a glass substrate 5 held by the adhesive sheet 51, such that the air inside each hexagon does not expand, and thereby securely holds the glass substrate 5.

Claims 18, 22, 28, and 29 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent 5,650,215 to Mazurek et al. ("Mazurek"). Claims 23-27 were rejected under 35 USC 103(a) as being unpatentable over Mazurek in view of U.S. Patent 6,197,397 to Sher et al. ("Sher"). Claims 18, 19, and 29 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent 5,869,150 to Iwamoto. Claims 20 and 21 were rejected under 35 USC 103(a) as being unpatentable over Iwamoto in view of U.S. Patent 5,407,519 to Joffe et al. ("Joffe"). Claims 22 and 28 were rejected under 35 USC 103(a) as being unpatentable over Iwamoto in view of Mazurek. Claims 23-27 were rejected under 35 USC 103(a) as being unpatentable over Iwamoto in view of Mazurek, and further in view of Sher. These rejections are respectfully traversed.

Regarding the rejections of independent claim 18 and dependent claim 24 (incorporated into claim 18) over the Mazurek, Iwamoto, and Sher references, whether taken alone or in combination, these references do not teach or suggest a substrate holding device in which an adhesive pad or adhesive sheet includes surface irregularities with raised portions, and the raised portions are arranged in the form of "hexagons being defined by a plurality of convex portions forming walls spaced apart from one another, wherein the walls do not form a closed ring," as recited in independent claim 18.

In Mazurek, the pressure-sensitive adhesive coated articles are masking tapes or removable labels, and have microstructured surfaces (see, e.g., column 1, lines 19-29, and column 3, lines 21-36 of Mazurek). The microstructures may be hemispheres, prisms, pyramids, ellipses, or grooves (see, e.g., column 11, lines 45-63 of Mazurek).

In Sher, a polygonal pattern 24 or 26 is defined by a series of ridges 28 (see FIG. 1 of Sher) formed on an adhesive face (see column 7, lines 24-28), or hexagons in a honeycomb arrangement (see column 21, line 1).

However, there is no teaching or suggestion in the Mazurek, Iwamoto, Sher references of a substrate holding device in which an adhesive pad or adhesive sheet includes surface irregularities with raised portions, the raised portions being arranged in the form of "hexagons being defined by a plurality of convex portions forming walls spaced apart from one another, wherein the walls do not form a closed ring," as claimed.

For at least the reasons discussed above, the Mazurek, Iwamoto, and Sher references, whether taken alone or in combination, do not teach or suggest the Applicants' claimed invention. Therefore, independent claim 18 and dependent claims 19-21, 23, and 25-27 are patentable over the cited references.

It is believed that the claims are in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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